# Active Wingless Type MMTV Integration Site Family, Member 5A (WNT5A) Instruction Manual

## SBPP392Ra01

## Rattus norvegicus (Rat)

**Buffer Formulation** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits** Freeze-dried powder

Purity > 95% Isoelectric Point 8.8

**Applications** Cell culture; Activity Assays.

### **ACTIVITY TEST**

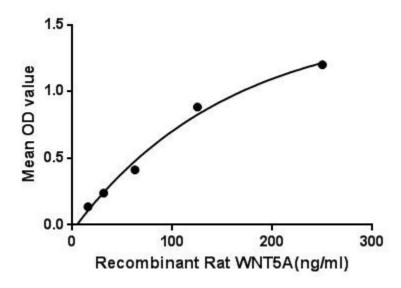


Figure. The binding activity of WNT5A with WIF1.

Wingless Type MMTV Integration Site Family, Member 5A (WNT5A) is a ligand for members of the frizzled family of seven transmembrane receptors. Can activate or inhibit canonical Wnt signaling, depending on receptor context. Stimulates cell migration. Decreases proliferation, migration, invasiveness and clonogenicity of carcinoma cells and may act as a tumor suppressor. Besides, WNT Inhibitory Factor 1 (WIF1) has been identified as an interactor of WNT5A, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat WNT5A and recombinant rat WIF1. Briefly, WNT5A were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of

100uL were then transferred to WIF1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-WNT5A pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of WNT5A and WIF1 was shown in Figure 1, and this effect was in a dose dependent manner.

#### **USAGE**

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

#### STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

#### **STABILITY**

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

**Image** 

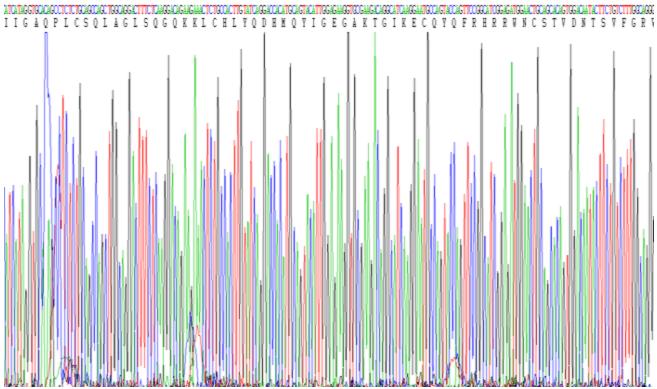


Figure. SDS-PAGE

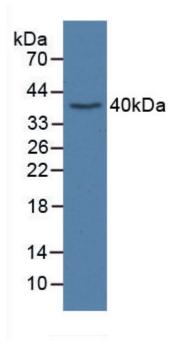


Figure. Western Blot

# [IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.